



Наукові перспективи  
Видавнича група

# Перспективи та інновації науки



**Тернопільський національний медичний університет імені І. Я. Горбачевського**

**Видавнича група «Наукові перспективи»**

**Луганський державний медичний університет**

**Громадська наукова організація «Система здорового довголіття в мегаполісі»**

**Християнська академія педагогічних наук України**

**Всеукраїнська асоціація педагогів і психологів з духовно-морального виховання**

*за сприяння КНП "Клінічна лікарня №15 Подільського району м.Києва",  
Центру дієтології Наталії Калиновської*

## ***«Перспективи та інновації науки»***

**№ 4(62) 2026**

**Київ – 2026**

**Ivan Horbachevsky Ternopil National Medical University**

**Publishing Group «Scientific Perspectives»**

**Luhansk State Medical University**

**Public scientific organization "System of healthy longevity in the metropolis"**

**Christian Academy of Pedagogical Sciences of Ukraine**

**All-Ukrainian Association of Teachers and Psychologists of Spiritual and Moral  
Education**

*with the assistance of the KNP "Clinical Hospital No. 15 of the Podilsky District of Kyiv",  
Nutrition Center of Natalia Kalinovska*

# ***"Prospects and innovations of science"***

**№ 4(62) 2026**

**Kyiv – 2026**

## ЗМІСТ

### СЕРІЯ «Педагогіка»

- Blyznyuk T. P., Borysenko D. V., Mandrykova M. O.** **46**  
*DIGITAL EDUCATIONAL ENVIRONMENT AS A TOOL FOR MODERNIZATION OF GENERAL SECONDARY EDUCATION INSTITUTIONS IN THE CONDITIONS OF A DIGITAL SOCIETY*
- Budianska V. A., Lyutviyeva Y. P.** **55**  
*INTERACTIVE PLATFORMS AS A TOOL OF CONDUCTING TRAINING COURSES ON THE BASICS OF RESEARCH IN HIGHER EDUCATION INSTITUTIONS*
- Fedoriv Ya., Fedoriv M., Semiankiv I., Pirozhenko I.** **68**  
*REVISITING THE SHADOWING METHOD TO BRIDGE THE PROSODIC GAP IN UKRAINIAN EFL*
- Hantimurova N. I., Humenna I. R., Hantimurov A. V.** **83**  
*PEDAGOGICAL STRATEGIES FOR DEVELOPING PROFESSIONAL COMPETENCIES OF MEDICAL UNIVERSITY STUDENTS IN UKRAINE*
- Helzhynska T. Y.** **95**  
*PROJECT-BASED ACTIVITY AS A TOOL FOR ENSURING THE BALANCED TRAINING OF ACADEMIC STAFF FOR ACADEMIC ENTREPRENEURSHIP*
- Khmeliar I. M., Kushnir L. O., Lysytsia D. L., Burban O. I.** **106**  
*THE ROLE OF MEDICAL EDUCATION IN FORMING A HEALTHY LIFESTYLE OF FUTURE MEDICAL PROFESSIONALS*
- Mukan N. V., Mukan O. V., Shayner H. I., Demus V. A.** **116**  
*CORPORATE LEARNING: A MULTI-ASPECT APPROACH TO CONTINUOUS PROFESSIONAL DEVELOPMENT IN THE 21ST CENTURY*
- Radzetskyi M., Smyrnova-Davlad N., Chernysh V., Obolonska T.** **127**  
*DIGITAL TRANSFORMATION OF PHYSICAL EDUCATION IN HEIS: FROM EMERGENCY RESPONSE TO SYSTEMIC INNOVATION*

**Budianska Viktoriia Anatoliivna** Candidate of Pedagogical Sciences, Associate Professor, Department of Pedagogy, Foreign Philology and Translation, Simon Kuznets Kharkiv National University of Economics, Kharkiv, <https://orcid.org/0000-0003-0621-4571>

**Lyutviyeva Yaroslava Pavlivna**, Senior lecturer, Department of Pedagogy, Foreign Philology and Translation, Simon Kuznets Kharkiv National University of Economics, Kharkiv, <http://orcid.org/0000-0002-5874-5692>

### **INTERACTIVE PLATFORMS AS A TOOL OF CONDUCTING TRAINING COURSES ON THE BASICS OF RESEARCH IN HIGHER EDUCATION INSTITUTIONS**

**Abstract.** This article explores the pedagogical potential of interactive platforms as a digital environment for organising training in the fundamentals of scientific research in higher education institutions. It analyses the main scientific approaches to defining the concepts of «interactive platform», «training in the fundamentals of scientific research» and «research competence» in the context of professional training for higher education students. The didactic possibilities of digital platforms are summarised, which enable the simulation of learning situations, the integration of theoretical knowledge and practical skills, the organisation of individual and group work, the stimulation of cognitive activity, and the development of critical thinking among higher education students.

Particular attention is paid to the structural components of training on an interactive platform, specifically the motivational-orientation, operational-activity and reflective-evaluation stages. It has been established that the combination of synchronous and asynchronous forms of interaction, the use of digital case studies, laboratory work, visualisations and group tasks contributes to the formation of research competence and the development of skills for independent research activity.

The article sets out practical recommendations for the implementation of interactive platforms in the research training of higher education students, covering the selection of appropriate tools, the design of training structures, the organisation of feedback, the facilitation of reflection, the monitoring of outcomes, and the training of lecturers. Prospects for further research are identified, including the evaluation of the effectiveness of various digital tools, the development of adapted didactic training models, the integration of analytical systems and artificial intelligence into the educational process, as well as the study of the impact of digital platforms on the development of soft skills and motivation among higher education students.

The research findings indicate that interactive platforms are an effective means of delivering training in the fundamentals of scientific research, combining theoretical instruction, practical activities, and digital technologies to systematically develop research competence among higher education students.

**Keywords:** interactive platforms, training, fundamentals of scientific research, research competence, digital learning environment, teaching technologies, pedagogical potential, training of higher education students.

**Будянська Вікторія Анатоліївна** кандидат педагогічних наук, доцент кафедри педагогіки, іноземної філології та перекладу, Харківський національний економічний університет імені Семена Кузнеця, Харків, <https://orcid.org/0000-0003-0621-4571>

**Лютвієва Ярослава Павлівна** старший викладач кафедри педагогіки, іноземної філології та перекладу, Харківський національний економічний університет імені Семена Кузнеця, Харків, <http://orcid.org/0000-0002-5874-5692>

## ІНТЕРАКТИВНІ ПЛАТФОРМИ ЯК СЕРЕДОВИЩЕ РЕАЛІЗАЦІЇ ТРЕНІНГІВ З ОСНОВ НАУКОВИХ ДОСЛІДЖЕНЬ У ЗАКЛІДІ ВИЩОЇ ОСВІТИ

**Анотація.** У статті досліджено педагогічний потенціал інтерактивних платформ як цифрового середовища для організації тренінгів з основ наукових досліджень у закладах вищої освіти. Проаналізовано основні наукові підходи до визначення понять «інтерактивна платформа», «тренінг з основ наукових досліджень», «дослідницька компетентність» у контексті професійної підготовки здобувачів вищої освіти. Узагальнено дидактичні можливості цифрових платформ, що забезпечують моделювання навчальних ситуацій, інтеграцію теоретичних знань і практичних умінь, організацію індивідуальної та колективної роботи, активізацію пізнавальної діяльності та розвиток критичного мислення здобувачів вищої освіти.

Особливу увагу приділено структурним компонентам тренінгу на інтерактивній платформі, зокрема мотиваційно-орієнтаційному, операційно-діяльнісному та рефлексивно-оцінювальному етапам. Установлено, що поєднання синхронних і асинхронних форм взаємодії, використання цифрових кейсів, лабораторних робіт, візуалізацій і колективних завдань сприяє формуванню дослідницької компетентності та розвитку навичок самостійної науково-дослідної діяльності.

У статті сформульовано практичні рекомендації щодо впровадження інтерактивних платформ у процес науково-дослідної підготовки здобувачів вищої освіти, що містять вибір відповідних інструментів, проектування структури тренінгу, організацію зворотного зв'язку, підтримку рефлексії, моніторинг

ISSN 2786-4952 Online

результатів та підготовку викладачів. Визначено перспективи подальших досліджень, зокрема оцінювання ефективності різних цифрових інструментів, розроблення адаптованих дидактичних моделей тренінгів, інтеграцію аналітичних систем та штучного інтелекту в освітній процес, а також вивчення впливу цифрових платформ на розвиток м'яких навичок і мотивації здобувачів вищої освіти.

Результати дослідження свідчать, що інтерактивні платформи є ефективним засобом реалізації тренінгів з основ наукових досліджень, здатним поєднувати теоретичну підготовку, практичну діяльність і цифрові технології, що забезпечує системне формування дослідницької компетентності здобувачів вищої освіти.

**Ключові слова:** інтерактивні платформи, тренінг, основи наукових досліджень, дослідницька компетентність, цифрове освітнє середовище, дидактичні технології, педагогічний потенціал, підготовка здобувачів вищої освіти.

**Problem statement.** The current stage of development in the higher education system is characterised by intensive processes of digital transformation within the educational sphere and a significant expansion of the range of interactive technologies used in teaching. Interactive online platforms, digital educational resources and web-based tools are being increasingly implemented in higher education institutions, changing established approaches to the organisation and delivery of teaching sessions, including those aimed at developing students' research skills. In such circumstances, it is particularly important to update and rethink the methodological foundations of teaching the fundamentals of scientific research, which involves not only the transmission of theoretical principles but also the construction of an educational environment that ensures the practical exploration of all stages of scientific inquiry.

Interactive platforms offer significant potential for organising and delivering training courses on the fundamentals of scientific research, based on the active involvement of students in the educational process, the completion of practice-oriented tasks, the simulation of typical and challenging research scenarios, collective analysis of the results obtained, reflection, and the receipt of timely feedback. The use of digital tools provides opportunities for data visualisation, the effective organisation of teamwork, and step-by-step support for research activities, whilst also contributing to the formation and reinforcement of the principles of academic integrity. At the same time, operating within a digital educational environment presents certain challenges, including fragmented information retention, a tendency towards the mechanical completion of learning tasks, a decline in the depth of analytical engagement with material, and difficulties in providing personalised support for the research work of higher education students.

Despite the growing number of academic works devoted to the digitalisation of education, the issue of using interactive platforms specifically as a coherent and

systematically organised environment for delivering training in the fundamentals of scientific research has yet to be adequately systematised in theory or generalised in practice within educational science. Most existing research focuses primarily on the technological aspects of implementing digital resources or on the general principles of developing research competence, whereas a comprehensive examination of their integration within a training-based approach to education requires further scientific analysis and conceptualisation.

Consequently, there is a clear need for a theoretical justification of the potential of interactive platforms as an effective digital environment for organising and conducting training courses on the fundamentals of scientific research in higher education institutions, which determines the academic relevance and validity of the chosen research topic.

**Analysis of recent research and publications.** The issue of using interactive platforms in the vocational training system for higher education students, particularly when organising training courses on the fundamentals of scientific research, is a focus of attention for both domestic and international researchers. Contemporary pedagogical research emphasises the importance of digital technologies for building an effective educational process and developing the core competencies of higher education students.

For instance, I. Bekh's works analyse the potential of digital educational platforms for implementing modular and project-based forms of learning, as well as for enhancing learners' motivation. M. Litvinova investigates the pedagogical conditions for the effective use of virtual educational environments to support students' independent cognitive activity. O. Bondarenko's research examines how to integrate digital services into practical and laboratory sessions to improve the quality of educational outcomes. T. Kovalenko focuses on the impact of online tools on the development of critical thinking, emphasising the role of digital platforms in systematising knowledge and stimulating reflective activity.

In international educational discourse, the issues surrounding the digitalisation of education and interactive learning have also been thoroughly explored. Graham Gibbs argues for the use of digital environments to enhance educational interaction and ensure high-quality feedback between teachers and students, emphasising the importance of interactivity for a deeper understanding of the subject matter. Linda B. Nilsson focuses on implementing active learning methods in a digital environment, particularly training and problem-based approaches that foster critical thinking and independent research. Diana Lorillard views online platforms as tools for implementing adaptive educational strategies capable of supporting a learner's individualised educational pathway.

David Wiley has also made a significant contribution by exploring the potential of open digital resources to broaden access to knowledge and foster collaborative forms of learning. Chris Dede analyses the potential of interactive technologies to develop 21<sup>st</sup>-century skills, particularly research, communication, and collaboration skills.

At the same time, most academic works focus primarily on individual components of digital learning – the technical potential of platforms, organisational models of the educational process, motivational aspects, or general principles for developing competencies in a digital environment. However, a comprehensive understanding of interactive platforms specifically as a holistic educational environment for delivering training in the fundamentals of scientific research in higher education institutions – taking into account their structure, methodological features, pedagogical potential and potential risks – remains underdeveloped.

Consequently, the issues outlined require further theoretical consideration and a systematic analysis of existing approaches and scholarly work in the educational literature.

**Identifying previously unresolved aspects of the overall problem.** Despite the existence of numerous academic works devoted to the processes of digitalisation in education and the development of research competence among higher education students, the issue of using interactive platforms specifically as a comprehensive educational environment for delivering training on the fundamentals of scientific research in higher education institutions remains under-explored. Most existing studies focus either on the technical potential of digital tools or on general issues concerning the organisation of research activities among higher education students, without providing a holistic vision of their integration within a training-based learning format.

In particular, the educational potential of interactive platforms in recreating and modelling the key stages of scientific research – from formulating the problem and defining the aims and objectives to selecting methods and analysing the results obtained – requires more in-depth consideration. Approaches to structuring training courses on the fundamentals of scientific research in the digital educational space, defining their content components, methodological support and effective mechanisms for organising feedback remain insufficiently systematised.

Furthermore, there is a lack of a comprehensive theoretical framework for the pedagogical conditions required for the successful implementation of such training programmes on interactive platforms, as well as a generalised system of criteria for assessing their effectiveness. This complicates the development of a scientifically sound model for the use of interactive platforms to foster research competence among higher education students and highlights the need for further theoretical and practice-oriented research in this area.

**The aim** of this article is to substantiate the potential of interactive platforms as a digital environment for delivering training on the fundamentals of scientific research in higher education institutions and to define the methodological principles for their use in developing students' research competence.

To achieve this objective, the following **tasks** have been identified: to analyse academic approaches to the use of interactive platforms and training-based learning methods in higher education institutions; to clarify the meaning of the terms «interactive platform», «training in the fundamentals of scientific research» and

«research competence» in the context of professional training for higher education students; to identify the didactic potential of interactive platforms as a medium for organising training in the fundamentals of scientific research; outline the structural components and characteristics of implementing training in the fundamentals of scientific research on an interactive platform, and develop practical recommendations for the introduction of interactive platforms into the process of research training for higher education students.

**Presentation of the main material.** The processes of digital transformation in higher education highlight the need to review established approaches to teaching subjects that develop students' research skills. The course «Fundamentals of Scientific and Pedagogical Research» involves not only mastering the theoretical foundations of the structure, methodology and logic of scientific inquiry, but also developing practical skills – from formulating a problem and defining the object and subject of research to selecting relevant methods, analysing and interpreting the results obtained. In this context, a training-based approach to organising learning is regarded as an effective means of stimulating the cognitive activity of higher education students, whilst interactive platforms serve as an effective digital environment for its implementation.

An interactive platform should be viewed as a multifunctional digital educational space that facilitates both synchronous and asynchronous interaction among participants in the educational process, the organisation of collaborative activities, prompt feedback, as well as the collection and analysis of learning outcomes. Its functional capabilities (video conferencing, chats, shared documents, interactive whiteboards, tests, surveys, forums) create the conditions for simulating real research situations and the step-by-step exploration of the components of scientific work.

Training in the fundamentals of scientific research, delivered in a digital environment, is characterised by a clear structure. At the motivational and orientation stage, the importance of research activity for future professional fulfilment is emphasised, expected outcomes are outlined, and rules for interaction on the platform are established.

The operational-activity stage involves carrying out practical tasks: formulating a research problem, proposing hypotheses, developing research tools, analysing case studies, and conducting mini-research projects in small groups. The platform's interactive features enable collaborative editing of materials, discussion of interim findings, and peer assessment of results. During the reflective and evaluative stage, participants conduct a self-analysis of their work, engage in collective discussion of difficulties and achievements, and receive detailed feedback from the lecturer.

The educational benefits of Interactive platforms in such training courses include fostering an active role for students, combining theoretical knowledge with practical application, and developing critical and analytical thinking. A significant advantage lies in tools for data visualisation, digital processing of results, and the creation of presentations, diagrams and mind maps, which help students grasp the logic and sequence of scientific inquiry.

At the same time, the effectiveness of using interactive platforms depends on adherence to several methodological principles: careful planning of the training content, ensuring that the chosen digital tools align with the set educational objectives, facilitating active participation, and providing systematic feedback. It is important to prevent the formalisation of educational activities and the excessive technocratisation of the process, where the use of digital tools supplants pedagogical appropriateness and the substantive content of learning.

It is therefore advisable to view interactive platforms not merely as a tool for the technical support of the educational process, but as a comprehensive digital environment for organising and delivering training on the fundamentals of scientific research.

Their implementation ensures the development of research competence among higher education students by integrating theoretical knowledge with the practice of scientific inquiry and also promotes independence, a responsible attitude towards educational activities, and the capacity for reflection in the context of digital interaction.

Interactive platforms, as a digital educational space for delivering training on the fundamentals of scientific research, possess significant didactic potential and create favourable conditions for stimulating the research activities of higher education students. The effectiveness of their use is determined not only by the functional characteristics of the platforms themselves, but also by scientifically grounded methodological approaches to the organisation of training in the higher education system.

In this context, it is pertinent to analyse academic approaches to the implementation of interactive platforms and training-based learning methods in higher education institutions, which enables us to outline the theoretical foundations for their seamless integration into the system of professional training for higher education students.

It is advisable to consider contemporary approaches to the use of interactive platforms in higher education across several interrelated dimensions. First and foremost, this concerns the competence-based approach, which focuses the educational process on the development of practical skills and research abilities through the active engagement of higher education students in a digital environment. Interactive platforms create opportunities for carrying out practice-oriented tasks, organising group work and collective discussion of results, which stimulates the development of critical thinking and the ability to conduct independent analysis.

The activity-based approach plays a key role, with teaching structured around simulations of real-life research situations. The use of training methods enables students to systematically work through all stages of scientific research – from formulating the problem and justifying the methods to analysing empirical data and interpreting the results. This format ensures the practical focus of the educational process and contributes to the development of research competence.

Equally significant is the integrative approach, which combines synchronous and asynchronous work formats and uses various digital tools and pedagogical methods. The result is a holistic digital learning environment that ensures a systematic approach to training, active interaction between students and the lecturer, and opportunities for continuous feedback and reflective analysis of their work.

Within the framework of contemporary academic concepts, particular attention is paid to fostering the independence of higher education students, their ability to plan, organise and manage their own learning, analyse their achievements and draw well-founded conclusions. Interactive platforms facilitate the step-by-step completion of tasks, joint project implementation, case analysis and practical exercises, ensuring a harmonious combination of theoretical training with practical activities.

At the same time, academic research highlights the need to standardise and systematise methodological approaches to organising training sessions in a digital environment, defining their structure, content components and criteria for assessing effectiveness. Such work will contribute to the formation of a comprehensive methodological framework for the further implementation of interactive platforms as an effective environment for developing students' research competence within the higher education system.

Within the scope of our study, it is important to clarify the basic concepts that define the content and direction of the implementation of digital technologies in higher education student training.

An interactive platform is a digital environment that facilitates the organisation of the educational process through integrated tools for communication, collaboration, information exchange and feedback between participants in the educational process. It promotes active student participation in educational activities, the simulation of professional scenarios, and the implementation of interactive teaching methods, allowing not only the processing of educational content but also the development of critical and creative thinking skills within a digital environment. According to researchers, an interactive platform is an information and technology tool that allows users to interact with one another or with a computer system [1].

Academics define the concept of «training» as an interactive teaching method and an organisational form of the educational process that combines a system of exercises and tasks with group interaction, aimed at enhancing participants' knowledge, abilities and skills [6].

N. Demchenko and T. Gordienko note that «educational training is a form of active learning that involves the creation of practical situations and exercises in which participants simulate real-life actions and acquire practical skills aimed at self-improvement, reflection and the development of professional competencies» [3].

Training in the fundamentals of scientific research is an educational activity aimed at developing students' ability to conduct scientific inquiry and research. Such training involves systematic practical activities by higher education students in simulated learning situations that closely resemble real scientific work, including

ISSN 2786-4952 Online

problem formulation, the definition of research methods, data analysis and the interpretation of results. It combines active learning strategies, group work, reflection on results and feedback, which facilitates not only the acquisition of theoretical foundations but also the development of relevant research skills in a digital environment

In the context of digital technologies and training-based learning methods, particular attention is paid to developing students' ability to conduct effective research and process information, which highlights the need to clarify the concept of research competence.

In particular, L. Karpova interprets it as «an integrated personal and professional quality that reflects motivation for scientific research, the level of mastery of research methodology in practice, and the development of personally significant qualities» [4]. This view is shared by M. Golovan and V. Yatsenko, who note that «research competence is a holistic, integrative personal quality that combines knowledge, skills, experience of the researcher's activities, value-based attitudes and personal qualities, and manifests itself in the readiness and ability to carry out research activities with the aim of acquiring new knowledge through the application of scientific methods, and the use of a creative approach in goal-setting, planning, decision-making, and the analysis and evaluation of research outcomes» [2]

In O. Norkina's study, research competence is defined as an integrated quality of a teacher, characterised by motivation and a positive attitude towards research activity, a holistic system of the knowledge, skills, abilities and personal qualities necessary for this, reflected in the readiness and ability to carry out one's own research activities to improve the quality of education [5].

A synthesis of the definitions provided by various authors allows us to conclude that research competence is a holistic characteristic of the trainee's personality, integrating motivation, knowledge, abilities and skills for conducting scientific research. It is an important outcome of implementing training technologies and digital educational platforms in the training of specialists at higher education institutions.

Since the development of research competence among higher education students is a holistic, integrative aspect of the individual, encompassing knowledge, abilities, skills, and motivation for scientific inquiry, it is important to consider how modern digital technologies and training-based learning methods can effectively foster this competence. In this context, interactive platforms serve as a didactic environment that combines technological and pedagogical tools for organising educational activities, enabling the simulation of teaching and research work through the creation of virtual laboratories, case studies and projects, which allows higher education students to carry out scientific tasks step-by-step in conditions approximating real professional practice, and the stimulation of cognitive activity through interactive tests, surveys, games and multiple-choice tasks, which stimulates the development of analytical and critical thinking, support for teamwork and communication through synchronous and asynchronous means of interaction, such as chats, video conferences, forums, shared

documents and interactive whiteboards, which contributes to the development of teamwork skills and interpersonal interaction, interactive reflection and feedback, which enables students to analyse their own actions, assess their progress, receive comments from the lecturer and peers, and develop independence and responsibility for learning outcomes, as well as the integration of theoretical knowledge and practical skills through a combination of text materials, multimedia, diagrams and mind maps, enabling the effective application of theory in practice.

Key features of training on the interactive platform include the use of synchronous and asynchronous forms of interaction to ensure flexibility and personalised learning, a clear integration of theoretical material with practical exercises and case studies, the use of data visualisation tools and electronic templates for creating graphs, tables and diagrams, the organisation of group and collaborative tasks, which fosters the development of teamwork skills and communication, as well as continuous reflection and monitoring of results, which ensures the development of research competence and self-regulation of educational activities. Thus, interactive platforms not only facilitate the organisation of training sessions but also create a holistic digital environment for the development of research competence among higher education students, combining theory and practice, individual and collective activities, active learning and reflection on results.

After determining the educational potential of interactive platforms and outlining the structural components of training courses on the fundamentals of scientific research, it becomes clear that the effective use of such digital environments requires systematic practical guidance. These should take into account organisational, methodological and technological aspects, ensuring the integration of interactive platforms into the educational process and contributing to the development of research competence among higher education students. In particular, practical recommendations for implementing interactive platforms in higher education research training cover several key areas. The first aspect is the selection of a suitable platform and its tools, which involves choosing a digital environment with capabilities for synchronous and asynchronous work, the availability of tools for creating tests, tasks, case studies and data visualisation, as well as ensuring access to the platform for all participants in the educational process and providing technical support. The second aspect is the design of the training structure, which involves developing a phased lesson format comprising motivational-orientation, operational-activity, and reflective-assessment stages, using various forms of interaction – individual, group, and collective – to combine independent study of the material with teamwork. The third aspect – the integration of theory and practice, achieved through the use of digital case studies, interactive graphs and tables, the simulation of research scenarios, and the completion of laboratory work, which ensures the practical application of theoretical knowledge, as well as encourages higher education students to create their own research projects and present their results in a digital environment. The fourth aspect – supporting feedback and reflection, which involves the use of surveys, comments, peer

assessment and discussion of results to actively engage students in the educational process and develop their ability to self-regulate and analyse their own learning activities. The fifth aspect is the development of research competence, which involves planning tasks that stimulate critical thinking, data analysis, information retrieval and the application of various research methods, as well as combining individual and group tasks to develop professional and communication skills. The sixth aspect is monitoring effectiveness and improvement, which involves implementing systems for assessing learning outcomes and research activities, regularly analysing the effectiveness of the platform and training methods, and making changes to the structure and content of sessions based on the data obtained.

Finally, the seventh aspect is teacher training and methodological support, which involves training educators in the effective use of interactive tools and training methods, as well as developing methodological guidelines and task templates to ensure a consistent approach to organising training sessions. Adherence to these recommendations enables the creation of a systematic and holistic digital environment that combines theoretical training with practical application, individual and group activities, active learning and reflection, thereby promoting the effective development of research competence among higher education students.

**Conclusion.** This article analyses the pedagogical potential of interactive platforms as a medium for organising training courses on the fundamentals of scientific research in higher education institutions. Key concepts have been clarified: ‘interactive platform’, ‘training in the fundamentals of scientific research’ and ‘research competence’, which have made it possible to determine their role in the professional training of higher education students. A synthesis of scientific approaches indicates the high potential of interactive technologies to develop practical skills and competencies in research, stimulate learning, and foster critical thinking.

The didactic possibilities of interactive platforms are examined, including their ability to simulate learning situations, facilitate collaborative work, provide feedback and reflection, and integrate theoretical knowledge into practical research tasks. The structural components of training in the fundamentals of scientific research on an interactive platform, along with the methodological features of its implementation, have been outlined.

Practical recommendations for integrating interactive platforms into the research training of higher education students include selecting an appropriate digital environment, designing training stages, integrating theory and practice, organising feedback, developing research competence, and training lecturers. Adherence to these recommendations contributes to the creation of an effective digital learning environment, the development of independence, responsibility, and practical skills among higher education students, and the enhancement of the effectiveness of training-based learning methods.

Consequently, interactive platforms serve as an effective environment for delivering training in the fundamentals of scientific research, capable of ensuring the

systematic development of research competence among higher education students and the integration of modern digital technologies into the educational process.

**Prospects for further research** into the use of interactive platforms for organising training courses on the fundamentals of scientific research involve an in-depth examination of their educational potential and their impact on the development of research competence among higher education students. First and foremost, it is important to analyse the effectiveness of various interactive tools, including forums, chats, video conferences, virtual laboratories and multimedia resources, in order to determine their effectiveness in the professional training of higher education students. Another important area is the development and testing of didactic training models, adapted to the specific requirements of different disciplines and educational levels, that combine synchronous and asynchronous educational interaction. Particular attention should be paid to research into the impact of the digital learning environment on the development of soft skills, specifically communication, social, organisational and intercultural competencies. The introduction of analytical tools and artificial intelligence technologies is promising, involving the use of automated assessment systems, adaptive learning programmes and educational analytics to improve the quality of training sessions. Furthermore, a comprehensive study of the long-term impact of interactive platforms on the academic performance and motivation of higher education students during their research and professional training is advisable. Implementing these areas will help optimise the use of digital technologies in higher education institutions and ensure a scientifically sound approach to developing the research competence of future specialists.

#### **References:**

1. Halushko, N. A., Khriapin, E. O., Rudnik, D. H. (2025). Vykorystannia interaktyvnykh platform zdobuvachamy istorychnoi osvity pid chas navchannia ta pedahohichnoi praktyky [The use of interactive platforms by students of historical education during training and pedagogical practice]. *Pedahohichna innovatyka : suchasnist ta perspektyvy – Pedagogical innovations : modernity and prospects, 10(1)*, 9-13 [in Ukrainian].
2. Holovan, M. S. & Yatsenko, V. V. (2012). Sutnist ta zmist poniattia «doslidnytska kompetentnist» [The essence and content of the concept of «research competence»]. *Teoriia ta metodyka navchannia fundamentalnykh dystsyplin u vyshchii shkoli – Theory and teaching methods of fundamental disciplines in higher education, 7*, 55-62 [in Ukrainian].
3. Demchenko, N. & Hordiienko, T. (2023). Osoblyvosti vykorystannia navchalnoho treninhu yak zasobu pidhotovky maibutnoho vchytelia [Peculiarities of using educational training as a means of training a future teacher]. *Naukovi zapysky. Seriiia «Psykhologo-pedahohichni nauky» – Proceedings. Series «Psychological and pedagogical sciences», 1*, 71-78 [in Ukrainian].
4. Karpova, L. (2019). Doslidnytska kompetentnist vchytelia novoi ukrainskoi shkoly [Research competence of the teacher of the new Ukrainian school]. *Molod i rynek – Youth and the market, 2 (168)*, 85-89 [in Ukrainian].
5. Norkina, O. V. (2017). Rozvytok doslidnytskoi kompetentnosti vchyteliv matematyky zasobamy informatsiino-komunikatyvnykh tekhnolohii [Development of research competence of mathematics teachers by means of information and communication technologies]. *Extended abstract of candidate's thesis*. Uman [in Ukrainian].

6. Sytnik, T. (2023). Vykorystannia treninhu yak interaktyvnoi tekhnolohii navchannia na zaniattiakh z dystsypliny «Ukrainska mova (za profesiinym spriamuvanniam)» u medychnykh zakladakh vyshchoi osvity [The use of training as an interactive learning technology in classes on the discipline «Ukrainian language (by professional direction)» in medical institutions of higher education]. *Visnyk Cherkaskoho natsionalnoho universytetu imeni Bohdana Khmelnytskoho. Serii: «Pedagogichni nauky» – Bulletin of the Cherkasy National University named after Bohdan Khmelnytskyi. Series: «Pedagogical Sciences», 2, 24-31 [in Ukrainian].*

#### **Література:**

1. Галушко Н. А., Хряпін Е. О., Руднік Д. Г. Використання інтерактивних платформ здобувачами історичної освіти під час навчання та педагогічної практики / Н. А. Галушко, Е. О. Хряпін, Д. Г. Руднік // Педагогічна інноватика: сучасність та перспективи. – 2025. – № 10(1). – С. 9-13.

2. Головань М. С. Сутність та зміст поняття «дослідницька компетентність» / М. С. Головань, В. В. Яценко // Теорія та методика навчання фундаментальних дисциплін у вищій школі. – Кривий Ріг: Видавничий відділ НметАУ, 2012. – Вип. VII. – С. 55-62.

3. Демченко Н. Особливості використання навчального тренінгу як засобу підготовки майбутнього вчителя / Н. Демченко, Т. Гордієнко // Наукові записки. Серія «Психолого-педагогічні науки» (Ніжинський державний університет імені Миколи Гоголя). – 2023. – № 1. – С. 71-78.

4. Карпова Л. Дослідницька компетентність вчителя нової української школи / Л. Карпова // Молодь і ринок. – 2019. – № 1(168). – С. 85-89.

5. Норкіна О. В. Розвиток дослідницької компетентності вчителів математики засобами інформаційно-комунікативних технологій : автореф. Дис. На здобуття наук. Ступеня канд. Пед. Наук : спец. 13.00.04 «Теорія і методика професійної освіти»/ О. В. Норкіна. – Умань, 2017. – 20 с.

6. Ситнік Т. Використання тренінгу як інтерактивної технології навчання на заняттях з дисципліни «Українська мова (за професійним спрямуванням)» у медичних закладах вищої освіти / Т. Ситнік // Вісник Черкаського національного університету імені Богдана Хмельницького. Серія: «Педагогічні науки». – 2023. – № 2. – С. 24-31.

*Дата першого надходження статті до видання: 02.04.2026*

*Дата прийняття статті до друку після рецензування: 16.04.2026*